

## ABSTRACT

A method of estimating a downlink channel between a base station and a mobile terminal in a mobile telecommunication system. In the method the base station estimates the uplink channel between the mobile terminal and the base station, deduces, from the variations in the uplink channel, variations in the downlink channels, makes an initial estimation of the downlink channel at a first instant, and estimates at a second instant the downlink channel from the initial estimation at the first instant and variations in the downlink channel between the first and second instants.